

## DOCUMENT RESUME

ED 290 534

PS 016 980

**AUTHOR** Mirabelli, Alan  
**TITLE** The Information Society: Friendly to Families by Design or by Accident?  
**INSTITUTION** Vanier Inst. of the Family, Ottawa (Ontario).  
**PUB DATE** Nov 85  
**NOTE** 17p.; Paper presented at the European Expert Meeting (West Berlin, Germany, November 25-December 1, 1985).  
**PUB TYPE** Viewpoints (120) -- Speeches/Conference Papers (150)  
**EDRS PRICE** MF01/PC01 Plus Postage.  
**DESCRIPTORS** Community Role; \*Computer Networks; Economic Factors; \*Employment; Family (Sociological Unit); Foreign Countries; \*Futures (of Society); Individualism; \*Social Change; \*Technological Advancement  
**IDENTIFIERS** \*Canada; Family Policy; \*Social Needs

**ABSTRACT**

Optimistic, "computopian" scenarios of the new information age emphasize the possibility of radically reversing the central tendencies of industrialization through the implementation of computer technologies that increase the ability to recognize and accommodate the needs of individuals. Pessimistic, dystopian scenarios, in contrast, point out that microelectronic technologies have been introduced as a way to greater efficiency in industrial production. Historical antecedents suggest that microelectronic innovation is not the precursor of a radically new form of social organization, but, rather, is the logical extension of the historical trend to rationalize production processes and to counter the declining rate of profit by substituting equipment and machinery for labor and wages. Whereas computopian and dystopian views recognize the capacity of the new technologies to increase differentiation, it is evident that increased social differentiation has increased social disintegration. At a time of crisis in the welfare state, governments now hope, unrealistically, to find within a compassionate community the resources needed to compensate for the loss of institutional supports and services. As the price of estrangement in society becomes increasingly apparent, public policy must be focused on the reintegration of society. In that effort, technological innovation has an as yet unrealized role to play. (RH)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

# PERSPECTIVES

THE VANIER INSTITUTE OF THE FAMILY / L'INSTITUT VANIER DE LA FAMILLE

120 Holland, Ottawa, Canada K1Y 0X6 (613) 722-4007

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.  
☐ Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

European Expert Meeting

"The Impact of the Information Society  
and New Technologies on the Family."

West Berlin

November 25th - December 1st, 1985

THE INFORMATION SOCIETY - Friendly to Families by Design or by Accident?

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Vanier Inst.  
of Family

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)"

Alan Mirabelli  
Coordinator of Communications/Information  
and Administration  
Vanier Institute of the Family  
OTTAWA, Canada

"The information epoch to be brought about by computer-communications technology does not mean simply that it will have a big socio-economic impact upon contemporary industrial society; it will demonstrate a force of societal change powerful enough to bring about the transformation of society into a completely new type of human society, which is the information society". (1)

In both specialist and popular sources of information, scenarios that promise us a sneak preview into our futures in a microelectronic world abound. There is no consensus about where these technological developments might be leading but competing interpretations might well be divided into two broad groupings.

There are, on the one hand, black images. Images of the Coming Dark Age and Visions of Computopia to use Masuda's term. What differentiates these two competing views of an electronic future? For the sake of oversimplification, the pessimists are united in their belief that the widespread introduction of drastically improved systems of communication coupled to powerful computing capacities will exacerbate, not alleviate, the problems they have come to regard as inherent in industrialized modes of production and social organization. The optimists, the Computopians, believe that microelectronics technologies carry within them the inherent potential to alter radically the technological foundations of our society, making the concerns and preoccupations characteristic of advanced industrial societies appear obsolete and anachronistic.

What unites those who believe in the virtues of microelectronics and their capacity to usher in a so-called post-industrial era is their promises that the technologies carry the capacity to reappropriate the personal. Industrial modes of organization and production, whether in the context of socialist or capitalist economies, are characteristically oriented toward the goals or intermediate goals of standardization, synchronization, concentration, maximization, specialization and centralization. OR, we can shorten the list by saying efficiency, control and profit (either to the capitalist or to the state). Within industrial societies, the interests and purposes of the individual person are subordinated to these systemic goals. The efficiency of the system demands an audience of mass consumers with homogeneous tastes in order to complement the standardized production methods of industry. Centralization of production and decision-making requires a geographically mobile labour force accustomed to both the pluses and minuses of urban living. Maximization of return on investment requires a labour force directed toward high productivity and efficiency which, in turn, leads to mechanisms of control and surveillance.

According to the optimists, all this is passé or soon will be. Their image of a microelectronics future is predicated on the unique characteristics of microelectronic technologies that are (in contrast to the mechanized technologies of industrialism) small, yet with a high capacity, relatively inexpensive (only because they are mass produced), flexible or transformable in function and capable of interfacing with a variety of geographically distant computer/communication systems.

Accordingly, proponents of the new information age emphasize the possibilities for radically reversing the central tendencies toward which industrialization has led. We are told that we may look forward to customizing information to our own purposes thereby reversing the trend toward standardization. The production of material goods will become decentralized in contrast to the predominant industrial trend maximizing on economies of scale. With this decentralization it is suggested will come lesser concentrations of capital and power. Educational opportunities will proliferate such that we can learn at our own pace, according to our own needs and interests and with and from others who may be geographically remote from us. There is talk of electronic cottage industries which promise, in the words of Maurice Champagne Gilbert to reintegrate the two solitudes - the spouse at home and the spouse at work. The fragmentation of work and leisure, family and job, the private world of the overtime mother and the public world of the part-time father will be overcome as the home becomes connected to a computer-based network and becomes once again the centre of both consumption and the production of information in various learn-at-home and work-at-home scenarios.

The disabled we are told will acquire the right to participate and the old will maintain it. Continuing education will become a requirement easily satisfied in a fast-changing society. In short, optimistic images of a microelectronics future depict a society in which the diverse and pluralistic needs of its citizens are not subordinated to the needs of industrial systems of mass production, mass consumerism and mass communications. Rather, the needs of individual persons will be recognized and accommodated as the value of the personal is reappropriated. It is an image of a society wherein we

would all be treated "like a somebody," and where the family, the home and the community would once again become the significant base for human activity.

Toffler, in his book The Third Wave, heralded the "electronic cottage industry."<sup>(2)</sup> Visions abound of the home as the new-found centre of consumption and production of information on the basis of learn-at-home and work-at-home scenarios. These scenarios are based primarily on two main assumptions. First, because intelligent terminals and communications links exist, people will wish to make use of them. Second, home-based work has the potential to reduce capital investment costs and energy costs of public places of education and work.

At the same time, the home and the family in recent years have been characterized as "the overloaded fuse."<sup>(3)</sup> What are the implications for family life of increased usage of information technology in the home? Ties with traditional peer groups could erode, replaced by less personal electronic networks. Terminal interaction is an individual activity; even television until now could be considered a small-group activity. The psychological and behavioural effects of an increase in the level of voluntary and forced isolation becomes a key concern.

Dickerson and Gentry note in their "Characteristics of Adopters and Non-Adopters of Home Computers" that the likely candidate for a successful computer adopter is a "logical introvert", a homebody who is "introverted, rational, quantitatively oriented, unsocial" and who is "interested neither in the arts nor in innovations that would enhance ability to communicate" with others.<sup>(4)</sup>

Bringing home the work means that many spouses, who now see each other for a limited time each day would be forced to live together much more intimately. For many, this prolonged intimate relationship would be problematic. The average modern home is not designed for such close working and living patterns. In "Telecommuting: The Employee's Perspective", Ilan & Meira Salomon noted that "the body of research reviewed indicates that the impacts of work at home on the household's lifestyle are not favourable. Adding yet another function to the physical space of home could cause more tension, which may outweigh the expected benefits for the individual".<sup>(5)</sup>

Similarly, communities have not evolved so that they can provide the social contact which affirms and confirms the capacities of persons. This role has been met primarily within the context of the formal workplace. Pressure would increase if families become more isolated without a community to provide that new and important social context. As Mosco stated, "to rely on the technology to rebuild our sense of community is to invite further erosion of what community remains".<sup>(6)</sup>

Margretta Olson in her Overview of Work-at-Home Trends in the United States<sup>(7)</sup> stated that the reasons companies gave for preferring work at home arrangement focussed mainly on cost saving, increased productivity, attracting or retraining qualified personnel, social responsibility (i.e. employing the disabled), computer utilization during off-peak hours, and market potential. Quality of work life or flexible working options to accommodate family requirements did not seem to be a major concern.

While the computopians propose an idealized image of a society that embodies values that are not to be dismissed, it is the dystopians who provide a more realistic assessment of the systemic restraints that define the purposes toward which any technological innovations will be oriented. With their appreciation of the historical evolution of modern social-economies, their analyses suggest that microelectronics technologies are now being introduced as instrumentalities, as means, toward the realization of what remains essentially the industrial goal of efficient material production.

Working from home, part-time, is increasing, particularly among women. In Canada in 1981, seventy-two percent of part-time workers were women. In recognizing the link between part-time work and the new technology, the Canadian Advisory Council on the Status of Women noted that:

"When automation is first introduced, the need for labour may fluctuate and the final requirements be unclear. For example, if the computer needs to be fed large amounts of information for retrieval purposes, the work-load may increase initially. Once this process is complete, the amount of work will drop back. Retraining staff to use machines such as word processors may take time at the start, but once the workers are proficient the work declines. During this transition period the flexibility of part-time work may be of great advantage to the employer. Because part-time workers have no job security, they may be hired or fired, called-in or not, to cover additional work periods, without the need to hire permanent staff who may not be required later." (8)

Heather Menzies noted that one can:

"Name an industry in the service sector and, as long as there is a lot of information work involved, one can almost predict where productivity can be improved, jobs eliminated and occupations transformed through automation. In hotels, reservations, room charges and other service charges are all handled, processed and recorded automatically. Cashiers can be bypassed as waiters and waitresses operate cash registers which



are not only simplified through electronics but are also able to transmit charges to front-office information systems and to perform the same range of data processing administrative functions as in a supermarket. A British paper on computers in hotel management concluded that payroll savings of up to 20 percent could result. Most of the savings would be expressed as reduced clerical workers, the paper said; however, integrated automated information systems in hotels would presumably threaten traditional administrative and other middle-management jobs as well." (9)

Word processors, industrial robots, electronic mail have been introduced not because of their potential to free us from routine tasks or to satisfy our personal needs for creative expression, initiative and self-direction but because these new computer-aided techniques are cheaper than the existing equipment and personnel they replace.

It is into a context of industrial, financial and economic crisis that microelectronics is being introduced. And it is toward the economic problems that the development and application of these technologies is principally directed. Viewed in this way, microelectronic innovation in the ways we store, retrieve and manipulate information is not the precursor of a radically new form of social organization but rather the logical extension of the historical trend to rationalize production processes and to counter the declining rate of profit by substituting what economists call constant capital (equipment and machinery) for variable capital (labour and wages). Just as the mainframe computers of the 50s and 60s were introduced into large government and private bureaucracies as they were beginning to crumble under the weight of paper, today's micros and minis are put forward as responses to the contraction of industrial economic growth.

The competing uses of the computopians and dystopians lead to different scenarios of a microelectronic future, one in which the personal is exploited in the interest of the systemic goals and the other in which the person is rediscovered as the essential value of human progress. Yet, ironically, what is common to both the computopians and the dystopians is their recognition of the potential of these technologies to differentiate between individuals and groups, to differentiate between services and products, to monitor individual transactions (or the transactions of individuals) to further individualize the experience of learning and education, to differentiate between producer and consumer.

These more discrete units are targeted as markets seeing the individual as essentially alone, isolated, and out of context. Lost is the appreciation of the social dimension of learning, production and consumption.

This common emphasis on the capacity for differentiation introduced into society and culture by the power of these information-manipulating processes and the technologies that permit such processes confronts us with what the Chinese know to be the meaning of crisis, a dangerous opportunity.

The dangers lie in the prognoses of the dystopians who argue that the more the personal becomes accessible to manipulation by political and/or commercial interests in an already highly individualized social and economic order, the more likely it is that we will lose whatever commitment remains to the public interest, the sharing of responsibility, our lives in community and therefore, to our participation in the common wealth.

Presently, for better or worse, it is, by and large, only through one's job that a person secures recognition for the contribution that he or she makes to the society. The increasing numbers of those who are unemployed experience problems similar to those long experienced by the old, by the disabled, by the young and by women outside of the labour force. What these groups share in common is the experience of those whose contributions to society have not been sufficiently appreciated nor encouraged precisely because their relationship to the labour market is non-existent, tenuous, indirect or unrecognized.

There is within the capacities of our present technologies the potential to develop useful innovations that could significantly enhance the lives of the marginally-employed, the poor, those with special educational needs, the disabled and the elderly. But these are not likely to flourish without a commitment to government planning and assistance to these people who exercise little power of their own in the marketplace. As well, they have become even more vulnerable to the unintended consequences of technologies introduced primarily to realize more efficiently the objectives of an industrial economic order even though the technologies themselves might, in a different context, facilitate progress toward the legitimate goals pursued by the computopians.

But today, the very objectives and principles of industrial economic order are being questioned and challenged, particularly as we confront the prospect of persistently high levels of unemployment. We have met the social, ecological and psychological limits to growth and we are confronted by the likely implications of 'slow-growth' or 'no-growth' economies. There is, in the context of the so-called 'crisis of the welfare state', much discussion

about the re-definition of work and the principle upon which the distribution of societal benefits are to be based. The power and capacities of new technologies have already altered profoundly our understanding of human work, our ways of communicating and relating with one another and, perhaps even, the ways we see and think about the world. The so-called Welfare State that has evolved as compensation for the erosion of informal family- and community-based sources of material and social support is threatened by restraint. The isolation of the nuclear family which has exacerbated our dependence upon the services provided by the Welfare State has reached critical proportions and this 'overloaded fuse' is now the context of much violence, sex-role conflict, alcoholism, suicidal adolescents and more. In North America a majority of those persons and families served by family agencies in connection with these indicators of marital and family conflict experience depression, tensions and anxieties related to unemployment, underemployment, financial insecurity and indebtedness.

We are now beginning to talk in terms of shorter 'employment' weeks, years and careers. We entertain proposals for flexible work schedules, part-time work, job-sharing and a more equitable distribution of employment opportunities in the labour force as well as of work opportunities in the domestic and community spheres of public participation and contribution.

These various challenges to the way of life with which we have become comfortable have emerged out of the individualism characteristic of industrial society and reinforced by technologies (both physical and social) that permit us to differentiate better between individuals and to better acknowledge and satisfy their needs as individuals. Ironically, however, we are now beginning

to recognize that the more we differentiate between individuals, the more alone we have become (for example special housing for the elderly, special education for the handicapped child, special programs for single parents, etc.). It is no accident therefore that we are now beginning to look at ways to reintegrate our lives and that family has been "rediscovered" through a renewed interest in family policy.

In traditional cultures, it was, by custom, elementary structures of kinship that provided for their members a sense of integration, a sense of coherence to the daily activities and the rituals that affirmed their membership in a life shared with others. Today, we still draw upon this recognition when we speak of family as a cornerstone of society. The idea of family has been appropriated as a principle of integration and suggests a return to an appreciation of relationships of kith and kin as central to the life of a society.

Governments are increasingly motivated to look again to families as a partial response to the so-called crisis of the welfare state. Family policy discussions echo the often heard suggestions that families must assume again responsibilities long taken over by various extra-familial sources of both material and social support. Thus, families will, it is assumed, come increasingly to care for the sick, the disabled, the old and the young as we proceed further down the path of deinstitutionalization. The functional significance of family has been rediscovered in the 1980's at a time when the State seems no longer able to afford to deliver the educational, health and social services upon which we have come to rely so heavily.

All too frequently, such suggestions consciously or unconsciously invoke a romanticized and unrealistic image of a way of family life gone by. What is this thing called the family that promises to deliver us from the contradictions and dilemmas of the modern state? It is by no means clear that one can reasonably speak of the family and its potential, its capacities, its strengths. Is it the strength of the isolated and so often economically disadvantaged single-parent family that we will come to rely upon more? Is it the capacities of those 25 per cent of families that live below the poverty line that will sustain us? Is it the dual wage-earning family (today's statistical norm) that will add to its frenetic schedule of industrial work routines, household management and child-care administration, the care of the old or the sick? Is it today's childless couples that will be supported in their old age by the family?

Governments now hope to find within a compassionate community the resources necessary to compensate for the withdrawal of the formal institutionally provided services and supports that have grown more and more costly as the price of our estrangement from one another has become more and more apparent. Here too in these appeals to 'community' one too often confronts naive and romanticized images of vibrant and strong commitments that have little resemblance to the personal relationships experienced by many who live in, for example, high-rise apartment complexes or 'bedroom communities'.

It is obviously naive to assume that families function without reference to the context in which they live. The relationships between parents and children are influenced by a wide range of extra-familial factors: the quality of working life enjoyed by parents; the physical, social and cultural

environment within which the family lives; the nature of the educational system to which parents and children have access; the messages delivered by the media of mass communication; the social supports, both formal and informal, upon which family members can rely. Indeed, recent research suggests that such extra-familial factors as the nature of a parent's employment, work schedule and on-the-job relationships or the frequency and intensity of neighbourhood interaction influence the quality of parent/child relationships as much as the characteristic patterns of interaction peculiar to the psycho-social interior of particular families. It is now apparent that if the relationships between parents and children are to be effectively supported and acknowledged within society, these objectives can only be accomplished by dignifying and supporting the more generic relationships of support and interdependence of which they are a special case.

A breadth of issues and various interests are implicated in the implementation of a family policy. Labour, finance, housing, education, culture, health, law, technology, social affairs - are all areas in which a family perspective must be brought to bear in a multisectorial approach.

Emphasis needs to shift to the designing of habitats rather than just houses; to providing opportunities for persons of every generation to get together in common activities; to ensuring schools become genuine centres of culture and learning accessible to the population in general such that occasions for integrating school life with that of the community can be realized; to providing services to families that are oriented toward the support of mutual help and the development of educational and preventive programs that go beyond curative and crisis-oriented services; to providing

services and programs designed to dignify the roles of both mothers and fathers and to assist in dividing fairly their social, family and economic responsibility; to providing working environments that allow for the integration of home life and working life; to providing a legal system which supports and enhances the capacity of family members to maintain legal, emotional, educational and economic commitments that continue after the dissolution of a marriage. In other words, we need to turn our attention to a process of reintegration.

What part can technological innovation play in this process. Until technologies take their place as a means through which people may better meet their needs in relationship one to another, rather than technologies being used to meet the individualistic needs of an industrial society, we will continue to identify the potential contribution of technological innovation to human well-being and to family life but we will fail to realize it.



## REFERENCES

1. The Information Society as Post-Industrial Society, Yoneji Masuda, World Future Society, U.S.A., 1981.
2. The Third Wave, Alvin Toffler, New York, William Morrow and Co. Inc., 1980.
3. The Feast of Fools, Harvey Cox, New York, Harper & Row, 1967.
4. "Characteristics of Adopters and Non-Adopters of Home Computers", Journal of Consumer Research, Vol. 10, 1985, Mary Dee Dickerson and James W. Gentry.
5. "Telecommuting: The Employee's Perspective", Technological Forecasting and Social Change, Vol. 25, 1984. Ilan Salomon and Meira Salomon.
6. "The Pay-Per Revolution and the Home", Vincent Mosco, Department of Sociology, Queen's University, Kingston, Ontario.
7. Overview of Work-at-Home Trends in the United States, Margretta Olson, New York University, 1983.
8. Women and Part-Time Work, Julie White, Canadian Advisory Council on the Status of Women, Ottawa, 1983.
9. Computers on the Job, Heather Menzies, James Lorimer & Co., Toronto, 1982.
10. See also "Submission of the Vanier Institute of the Family to the Standing Cabinet Committee on Social Development in Response to For Québec Families", Vanier Institute of the Family, Ottawa, March 1985.